

# **BEYOND STATISTICAL METHODS: TEACHING CRITICAL THINKING TO FIRST YEAR UNIVERSITY STUDENTS**

Jennifer Brown and Irene David  
*Department of Mathematics and Statistics*  
*University of Canterbury*  
*Christchurch*  
*New Zealand*  
Jennifer.brown@canterbury.ac.nz

We discuss a major change in the way we teach our first year statistics course. We have redesigned the course with emphasis on teaching critical thinking. We recognized that most of the students take the course for general knowledge and support of other majors, and very few are planning to major in statistics. We identified the essential aspects of a first year statistics course, given this student mix, focusing on a simple question, "Given this is the last chance you have to teach statistics, what are the essential skills students need?" We have moved from thinking about statistics skills needed for a statistician to skills needed to participate in today's society. We have changed the way we deliver the course with less emphasis on lectures and more on computer based tutorials, Excel, and computer skills testing, and written assignments. Feedback from students shows that they are very receptive and enthusiastic.